

## The Future of Violence Prevention Research and Practice

by  
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## Prevention Research-1985\* Romig, *Justice for Our Children*, 1978

- Casework: No evidence of effectiveness
  - Behavior Modification: Limited success, but should not be used for juvenile offenders
  - Teaching Academic Skills: Not effective
  - Work & vocational Training: Not effective
  - Group Counseling: Not effective
  - Individual Psychotherapy: Not effective
  - Therapeutic Camping, Diversion, Probation: Not effective
- See also: Martinson, 1974; Lipton et al., 1975; Sechrest et al., 1979  
Wright and Dixon, 1977.

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## Prevention Research-2008

- Better theory development and evaluation methodology & practice
- A growing number of programs demonstrated to be effective
- Increasing public & government support for evidence-based programs
- Confusion over scientific standard for evidence-based certification
- Limited dissemination of EB programs
- Relatively little attention to fidelity

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## Prevention Research- Agenda for Next 20 Years

- Establish consensus on scientific standard for certifying effective programs
- Upgrade program evaluation design, methodology and reporting
- The new research frontier: dissemination and implementation
- Address the barriers to dissemination & implementation of evidence-based programs

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## Confusion over standard

Defining evidence-based

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## Federal Program Lists

- Center for Mental Health Services (2000)
- National Registry (NREPP) (2002)
- Office of Safe & Drug Free Schools (2001)
- Blueprints for Violence Prevention (2007)
- National Institute of Drug Abuse (2003)
- Surgeon General Report (2001)
- Helping America's Youth (2007)
- OJJDP Title V (2007)

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## Consensus Across 8 Federal Lists

- No program appeared on all lists
- Only one program (LST) appeared on 7 of 8 federal lists as a model/exemplary/Level 1 program\*
- Two programs were on 5 lists: MST & TND
- 4 Programs on four lists: ALERT, ATLAS, Early Risers for Success, & FFT
- 11 Programs on 3 lists: BBBS, GBG, TNT, PATHS, MTFC, NFP, Project Northland, Focus on Family, Strengthening Families, Caring School Communities, Incredible Yrs.

\* Top category on each list.

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## Federal Working Group Standard for Certifying Programs as Effective\*

- Experimental Design/RCT
- Effect sustained for at least 1 year post-intervention
- At least 1 independent replication with RCT
- RCT's adequately address threats to internal validity
- No known health-compromising side effects

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## Hierarchical Program Classification\*

- I. *Model*: Meets all standards
- II. *Effective*: RCT replication(s) not indep.
- III. *Promising*: Q-E or RCT, no replication
- IV. *Inconclusive*: Contradictory findings or non-sustainable effects
- V. *Ineffective*: Meets all standards but with no statistically significant effects
- VI. *Harmful*: Meets all standards but with negative main effects or serious side effects
- VII *Insufficient Evidence*: All others

\*Adapted from *Hierarchical Classification Framework for Program Effectiveness*, Working Group for the Federal Collaboration on What Works, 2004.

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## Federal Working Group Classification of Top Programs on Other Lists

- Ctr. For MH Services: *Effective* (14/34)
  - Most have not yet been rated on FWG standard
- NREPP: *Model & Effective* (18/21)
  - Mod-4%; Effec-16%; Prom-16%; Incon/Insuff-64%
- NIDA: *Effective* (20/21)
  - Mod- 10%; Effec-25%; Prom- 25%; Incon/Insuff-40%
- Blueprints: *Model* (11/11)
  - Mod- 27%; Effec- 64%; Prom- 9%; Incon/Insuff-0%

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## Federal Working Group Classification for Top Programs on Other Lists

- OJJDP-Title V: *Exemplary* (33/40)
  - Mod- 9%; Effec- 30%; Prom- 15%; Ineff/Incon-45%
- OSDFS: *Exemplary* (9/9)
  - Mod- 11%; Effec- 23%; Prom- 33%; Ineff/Incon-33%
- HAY: *Level 1* (12/12)
  - Mod-25%; Effec- 30%; Prom- 0%; Ineff/Incon-42%

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## Defining “Evidence- Based”

- Programs classified as Model, Effective, or Promising on Federal Hierarchy
- Consistently positive effects from Meta Analyses
- Only Model programs should ever be taken to scale

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## Recommended Lists of Evidence-Based Programs: AS Behavior

- Blueprints (OJJDP): Model or Promising (100%)
- NIDA: Effective (60%)
- OJJDP Title V: Exemplary (54%)
- Office of Safe and Drug Free Schools (DOE): Exemplary (67%)
- HAY (OJJDP): Level 1 (58%)

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## Evaluation Design and Methodology

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## Upgrading design and methodology

- Establish consensus on definition of "replication"
- Embed replication in the design of 2<sup>nd</sup> & 3<sup>rd</sup> generation trials
- Assessment of fidelity
- Better attention to threats of internal validity
- External validity issues
- Adequate reporting of critical elements in evaluation design and methodology

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## Reporting Evaluation Study Findings

- All RCT's should be registered, following ICMJE-like guidelines
- Non-significant/negative findings are as important as significant positive findings
- Develop guidelines for issues that must be addressed in any publication
- Recurring problems: adequate description of design, tracking N's across waves and analyses; attrition analyses, estimates of effect size, threats to internal validity, etc.

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## The new research frontier: dissemination and implementation

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**...very little is known about the processes required to effectively implement evidence-based programs on a national scale. Research to support the implementation activities that are being used is even scarcer.**

**National Implementation Research Network, 2007**

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## Blueprints for Violence Prevention Replication: Factors for Implementation Success

Mihalic et al., 2004. Funded by OJJDP

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## Program Implementation

- Program Dissemination
- Program Fit
- Site Preparation
- Training
- Technical Assistance
- Program Fidelity/Adaptation
- Predictors of Program Quality
- Program Sustainability

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## PROGRAM DISSEMINATION CAPACITY

- Published material: Handbooks, curriculum, manuals, etc.
- Certification of trainers
- High quality, packaged T.A.
- Process evaluation measures
- Dissemination Organization: Dedicated to marketing and delivery
- Data management system in place

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## PROGRAM FIT

- Does the program address the needs and existing barriers to learning at this school?
- Has it been demonstrated effective for the type of community/school/students that will be involved?
- What level of certification does the program have? [many pushed prematurely with only efficacy trial]

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## SITE PREPARATION

- Most failures due to limited site capacity
- Critical elements: Local champion, administrative support, organizational stability, community credibility and routinization potential
- Develop clear expectations and contracts

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## TRAINING

- Hire all staff before training
- Hold line on requisite training
- Review program plans with staff before training
- Have administrators attend training
- Plan and budget for staff turnover
- Implement immediately after training

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## TECHNICAL ASSISTANCE

- Quality declined over time
- Lack of proactive delivery
- T.A. providers hard to reach, slow response
- School-based programs delivered best
- Family-based most consistent & proactive
- Variation in perceived need by program type

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## FIDELITY COMPONENTS

- Adherence: Delivered as designed/evaluated
  - BP; 86%-100%; LST- 81%-86%
- Exposure/Dosage
  - School BP-33%-50%; LST- 56%-78%
- Quality of Program delivery
- Participant Responsiveness

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## Fidelity vs Adaptation

- Need for local adaptation is over estimated
- Adaptations must fit with program rationale
- Language/cultural adaptations most easily justified
  - Little evidence for race/ethnicity, gender, or class differences in school program effects
- Most frequent threats to fidelity:
  - Frontline implementers
  - Disseminating Agency

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## Fidelity vs Adaptation

- Adaptation is as likely to reduce effects as enhance them
- Local adaptation may increase “buy in” but also creates uncertainty about program effects
- Program success must be judged by real changes in behavior, not number of adoptions or survival

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## Overcoming barriers to widespread dissemination

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## Why Are We Not Implementing EB Violence Prevention Programs?

- It's hard to sell prevention- the focus typically is on improving responses to violence
- Programs not addressing strongest risk/protective factors or clusters
- Confusion about standard for EB certification
- Politics and parochial judgment often trump research
- Increasing professional resistance to EB programs/practices
- Failure to implement with fidelity

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## Professional Resistance

- "I particularly enjoyed your most recent article warning about the potential tyranny of evidence-based practices ... I think you underplayed the possibility that an emphasis on such programs can inadvertently undermine rather than enhance school-wide reform efforts. ...there is virtually no evidence that evidence-based practices contribute to overall school effectiveness, as data on such an issue are never gathered."

Unidentified "well-respected scientist", Enews, August, 2007 (Vol 11, #11)

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## Impact of Unsafe Schools on Health and Academic Performance

- Poorer Student Health
- Higher Rates of Dropout
- Lower Test Scores
- Smaller Gains in Academic Performance over time

Controlling for grade in school, race/ethnic composition, % subsidized meals, average parent education, %ESL students

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## National Survey of School-Based Prevention Programs

- Over two-thirds of schools reported use of at least one substance abuse program; almost half reported using 3 or more programs.
- Only 26.8% of schools were implementing an effective (research based) substance abuse prevention program.
- In general, the quality of school-based prevention (delinquency, substance abuse, violence) practices is low.

Sources: Ringwalt et al., 2002. The Prevalence of Effective Substance Use Prevention Curricula in U.S. Middle Schools. *Prevention Science* 3:257-272. Gottfredson & Gottfredson, 2002. Quality of School-Based Prevention Programs: Results from a National Survey. *Journal of Research in Crime and Delinquency* 39:3-35

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## Feasibility Example

- Cost to provide every student in U.S. a model drug prevention program like LST is \$550 million per year
- Current national drug control spending is approximately \$40 billion per year
- This represents 1.5% of the current drug control spending

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## Conclusions

- We Need A Uniform Scientific Standard For Certifying "Evidence-Based" Programs
- Existing Federal Lists Provide Some Guidance, But Programs Other Than Those In The Top Category Are Often Problematic
- EB Program Should Be Selected For Its Known Effect On Particular Risks & Protective Factors For Specific Groups
- If You Decide To Use A Program Not Certified as EB, You Must Commit To Evaluating It
- Do Not Use Any Program Found to Be Ineffective or Harmful

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## THANK YOU

- Center for the Study and Prevention of Violence
- [www.colorado.edu/cspv](http://www.colorado.edu/cspv)

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## Referenced Websites

- NREPP: [www.nationalregistry.samhsa.gov](http://www.nationalregistry.samhsa.gov)
- Blueprints: [www.colorado.edu/cspv](http://www.colorado.edu/cspv)
- OSDFS:  
[www.ed.gov/admins/lead/safety/exemplary01/panel.html](http://www.ed.gov/admins/lead/safety/exemplary01/panel.html)
- NIDA:  
[www.drugabuse.gov/pdf/prevention/RedBook.pdf](http://www.drugabuse.gov/pdf/prevention/RedBook.pdf)
- OJJDP Title V:  
[www.dsgonline.com/mpg2.5/mpg\\_index.html](http://www.dsgonline.com/mpg2.5/mpg_index.html)
- CMHS:  
[www.prevention.psu.edu/pubs/Mental\\_Health\\_pbs.html](http://www.prevention.psu.edu/pubs/Mental_Health_pbs.html)
- Surgeon General:  
[www.surgeongeneral.gov/library/youthviolence/default/html](http://www.surgeongeneral.gov/library/youthviolence/default/html)

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